AMENDMENT IN THE NATURE OF A SUBSTITUTE TO H.R. 3929 OFFERED BY MR. HALL OF TEXAS AND MR. SMITH OF TEXAS

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Energy Pipeline Research, Development, and Demonstration Act''.

SEC. 2. FINDINGS.

The Congress finds that—

(1) energy pipelines are a key component of the energy infrastructure of the United States;

(2) pipelines can become more susceptible to failure with age;

(3) energy pipelines with unprotected rights-of-way and associated above-ground facilities are vulnerable to terrorist attacks and other disruptions and raise safety concerns;

(4) interruptions in service on major pipelines, whether a result of pipeline failure or purposeful action, can have enormous consequences for the economy and security of the United States;

(5) new energy sources such as hydrogen will require a new generation of pipelines; and

(6) a more coordinated research, development, demonstration, and standardization program is needed to ensure the use of existing technologies and the development of new technologies to increase the safety and security of these critical facilities.

SEC. 3. PIPELINE INTEGRITY RESEARCH, DEVELOPMENT, AND DEMONSTRATION.

(a) ESTABLISHMENT OF COOPERATIVE PROGRAM.—

(1) IN GENERAL.—The heads of the participating agencies shall develop and implement a program of research, development, demonstration, and standardization to ensure the integrity of energy pipelines and next-generation pipelines.

(2) ELEMENTS.—The program shall include research, development, demonstration, and standardization activities related to—

(A) materials inspection;

(B) stress and fracture analysis, detection of cracks, corrosion, abrasion, and other abnormalities inside pipelines that lead to pipeline failure, and development of new equipment or technologies that are inserted into pipelines to detect anomalies;

(C) internal inspection and leak detection technologies, including detection of leaks at very low volumes;

(D) methods of analyzing content of pipeline throughput;

(E) pipeline security, including improving the real-time surveillance of pipeline rights-of-way, developing tools for evaluating and enhancing pipeline security and infrastructure, reducing natural, technological, and terrorist threats, and protecting first response units and persons near an incident;

(F) risk assessment methodology, including vulnerability assessment and reduction of third-party damage;

(G) communication, control, and information systems surety;

(H) fire safety of pipelines;

(I) improved excavation, construction, and repair technologies; and

(J) other elements the heads of the participating agencies consider appropriate.

(3) ACTIVITIES AND CAPABILITIES REPORT.—Not later than 6 months after the date of the enactment of this Act, the participating agencies shall

transmit to the Congress a report on the existing activities and capabilities of the participating agencies, including the national laboratories. The report shall include the results of a survey by the participating agencies of any activities of other Federal agencies that are relevant to or could supplement existing research, development, demonstration, and standardization activities under the program created under this section.

(b) PROGRAM PLAN.—

(1) IN GENERAL.—Not later than 1 year after the date of the enactment of this Act, the participating agencies shall prepare and transmit to Congress a 5-year program plan to guide activities under this section. Such program plan shall be submitted to the Pipeline Integrity Technical Advisory Committee established under subsection (c) for review, and the report to Congress shall include the comments of the Advisory Committee. The 5-year program plan shall take into account related activities of Federal agencies that are not participating agencies.

(2) CONSULTATION.—In preparing the program plan, the participating agencies shall consult with appropriate representatives of State and local gov-

ernment and the private sector, including companies owning energy pipelines and developers of next-generation pipelines, to help establish program priorities.

(3) ADVICE FROM OTHER ENTITIES.—In preparing the program plan, the participating agencies shall also seek the advice of other Federal agencies, utilities, manufacturers, institutions of higher learning, pipeline research institutions, national laboratories, environmental organizations, pipeline safety advocates, professional and technical societies, and any other appropriate entities.

(c) PIPELINE INTEGRITY TECHNICAL ADVISORY COMMITTEE.—

(1) ESTABLISHMENT.—The participating agencies shall establish and manage a Pipeline Integrity Technical Advisory Committee (in this subsection referred to as the ''Advisory Committee''). The Advisory Committee shall be established not later than 6 months after the date of the enactment of this Act.

(2) DUTIES.—The Advisory Committee shall—

(A) advise the participating agencies on the development and implementation of the program plan prepared under subsection (b); and

(B) have a continuing role in evaluating the progress and results of research, development, demonstration, and standardization activities carried out under this section.

(3) MEMBERSHIP.—

(A) APPOINTMENT.—The Advisory Committee shall be composed of—

(i) 3 members appointed by the Secretary of Energy;

(ii) 3 members appointed by the Secretary of Transportation; and

(iii) 3 members appointed by the Director of the National Institute of Standards and Technology.

In making appointments, the participating agencies shall seek recommendations from the National Academy of Sciences.

(B) QUALIFICATIONS.—Members appointed to the Advisory Committee shall have experience or be technically qualified, by training or knowledge, in the operations of the pipeline industry, and have experience in the research and development of pipeline or related technologies.

(C) COMPENSATION.—The members of the Advisory Committee shall serve without compensation, but shall receive travel expenses, including per diem in lieu of subsistence, in accordance with sections 5702 and 5703 of title 5, United States Code.

(4) MEETINGS.—The Advisory Committee shall meet at least 4 times each year.

(5) TERMINATION.—The Advisory Committee shall terminate 5 years after its establishment.

(d) REPORTS TO CONGRESS.—Not later than 1 year after the date of the enactment of this Act, and annually thereafter, the participating agencies shall each transmit to the Congress a report on the status and results to date of the implementation of their portion of the program plan prepared under subsection (b).

SEC. 4. MEMORANDUM OF UNDERSTANDING.

Not later than 120 days after the date of the enactment of this Act, the participating agencies shall enter into a memorandum of understanding detailing their respective responsibilities under this Act, consistent with the activities and capabilities identified under section 3(a)(3). Each of the participating agencies shall have the primary responsibility for ensuring that the elements of the program plan within its jurisdiction are implemented in ac-

cordance with this Act. The Department of Transportation's responsibilities shall reflect its expertise in pipeline inspection and information systems surety. The Department of Energy's responsibilities shall reflect its expertise in low-volume leak detection and surveillance technologies. The National Institute of Standards and Technology's responsibilities shall reflect its expertise in standards and materials research.

SEC. 5. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated—

(1) to the Secretary of Energy $10,000,000;

(2) to the Secretary of Transportation $5,000,000; and

(3) to the National Institute of Standards and Technology $5,000,000,

for each of the fiscal years 2003 through 2007 for carrying out this Act.

SEC. 6. DEFINITIONS.

For purposes of this Act—

(1) the term ''energy pipeline'' means a pipeline system used in the transmission or local distribution of natural gas (including liquefied natural gas), crude oil, or refined petroleum products;

(2) the term ''next-generation pipeline'' means a transmission or local distribution pipeline system

designed to transmit energy or energy-related products, in liquid or gaseous form, other than energy pipelines;

(3) the term ''participating agencies'' means the Department of Energy, the Department of Transportation, and the National Institute of Standards and Technology; and

(4) the term ''pipeline'' means an energy pipeline or a next-generation pipeline.